

X-Ray and Electron-Microscopic Investigation
of the Ageing of an Al-Zn Alloy, by N. N. Buinov,
L. I. Podrezov.

RUSSIAN, per, Fiz Metall i Metall, Vol I, No 2, 1955,
pp 349-358.

Sci Mus Lib Tr 57/0115

Sci - Physics
Jul 57

49,368

Effect of Deoxidation with Aluminum Upon the
Irreversible Temper Brittleness of Structural
Alloy Steels, by E. N. Pokol'kov, et al.

RUSSIAN, per, Fizika Metallov i Metallovedenie,
Vol I, No 2, 1955, pp 366-367.

Brutcher Tr 3743

4946

35, 513

Sci - Minerals/Metals, Chemistry

Jun 1956

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RUSSIAN, per, Fizika i Metallovedeniye, Vol I, No 3,
1955.

CIA/FDD X-2278

CIA/FDD X-2278

Phase Composition of Temper Structures and Nature
of Changes in Magnetic Properties in the Third
Transformation Zone, by B. A. Apayev.

RUSSIAN, per, Fiz Met i Metall, Vol I, No 3, 1955,
pp 467-478.

Dept of Interior
Bur of Mines

Sci - Min/Met

Apr 58

61,174

Investigation of the Plastic Properties of Beryllium
Monocrystals, by R. I. Garber.

RUSSIAN, per, Fiz Metal i Metall, Vol I, No 3,
1955, pp 529-537.

UKSM GB 4

May 58

63,820

Table of Contents

RUSSIAN, per, Fizika i Metallovedeniye, Vol II, No 1,
1956.

CIA/FDD X-2278

216/800 X-2278

On the Thermodynamic Description of Magnetization
of Ferromagnetics Near the Curie Temperature, by
K. P. Belov, A. N. Goryaga.

RUSSIAN, per, Fiz Metallov i Metallov, SSSR, Vol II,
No 1, pp 3-9, 1950,

Navy Tr No 1498/MRL 615

Sci - Physics
Jun 57

48,069

JLA R-1770

Magnetostriction and the Boldhammer-Thompson Effect
in Certain Ferrites, by H. A. Smol'kov.

RUSSIAN, per, Fiz Metallov i Metallovedenie, SSSR,
Vol II, No 1, 1956, pp 10-15.

⁶
Navy Tr: 1486/NRL 613

Sci - Physics

48,208

May 57

On the Interaction Between Anisotropy of the
Hall Effect and Variations of the Magnetic
Field. Part 1. Investigation of Tin and
Indium, by E. S. Borovik, 10 pp.

Full tr

RUSSIAN, per, Fiz Metall i Metallovedenie SSSR,
Vol II, No 1, 1956, pp 33-42.

Navy Tr 1443/MRL 596

Sci - Physics

Disc 105 CTS/dex Mar 1957

45, 464

Mechanism of the Effect of Phosphorous and
Molybdenum Impurities on Temper Brittleness
of Steel, by V. I. Arkharov.
RUSSIAN, per, Fizika Metallov i Metallovedeniye,
Vol 2, Issue 1, 1956, pp 57-65.
AGSI J-5119
FSTC HT-23-189-68

Sci/Mat
Sep 68

363,285

Effect of "Rest" on the Strength of Case Hardened
Steel and Its Tendency to Delayed Rupture, by
S. S. Shurakov, 23 pp.

RUSSIAN, par, Fiz Met i Metall, Vol II, No 1, 1956,
pp 66-67.

Sci Mus Lib Tr 57/3162

Sci - Physics
Mar 58

60,524

Handwritten: 2-2-11710 NICL 564

Speed of Diffusion of Phosphorus in Steel, by
V. N. Svechnikov, S. S. Galubev.

RUSSIAN, per, Fiz Metal i Metall, Vol II,
No 1, 1956, pp 88-92.

NLL RTS 2179

Sci - M/M
Jul 63

238,167

Preparation of Pure Metals by Means of the Zone
Crystallization (Melting) Method, by B. Aleksandrov,
B. I. Verkin, B. Lazarev. ¹

RUSSIAN, bino per, Fiz Metal i Metall, Vol II, No 1,
1956, pp 93-99.

SIA Tr R-1804

Sci - Min/Met

56,094

Dec 57

Preparation of Pure Metals by Means of the Zone
Crystallization (Melting) Method, II, by B.
Aleksandrov, B. Verkin, B. Lazarev.

RUSSIAN, bimo per, Fiz Metal i Metall, Vol II, No 1,
1956, pp 100-104.

SLA Tr R-1803

Sci - Min/Met

56,095

Dec 57

Investigation of the Purification Mechanism of
Metals from Impurities by the Zone Recrystalliza-
tion (melting) Method, by B. Aleksandrov,
B. Verkin, I. Lifshits, G. I. Stepanova, 32 pp.

RUSSIAN, per, Fiz Met i Metall, Vol II, No 1,
1956, pp 105-109.

SLA R-1805

Sci
Aug 58

70,865

Effect of Rate and Degree of Plastic Extension on
the Relaxation and Subsequent Deformability of Metals
1., by L. I. Vasil'yev, L. M. Butkevich, E. I.
Orekhov.

RUSSIAN, per, Fiz Met i Metali, Vol II, No 3, 1956,
pp 142-145.

DSIR/31316/CT

Sci - Physics
Mar 58

Samunlik 57/3165
59,981

Effect of Rate and Degree of Plastic Extension
on the Relaxation and Subsequent Deformability
of Metals - II., by L. I. Vasil'yev, L. A.
Spevak.

RUSSIAN, per, Fiz Metal i Metallov, Vol II,
No 1, 1956, pp 146-148.

DSIR/31315/CT

Sci - Physics; Min/met 58,842
Feb 58

Part I. The Nonuniformity of Deformation on
 Plastic Compression, by G. I. Karpov;
 Part II. The Distribution of Deformation on
 Compression of Cylinders at High Rates, by
 G. I. Karpov, 12 pp.

RUSSIAN, per, Fiz Metal i Metall, Vol II,
 1956, pp 168-171, 172-175. ← SLA R-964
 ← SLA R-965
 ABC Tr 2822

Sci - Physics; Min/metals 47,130
 Apr 57 CTS/dex

Part 1
 DSIR. 13187/CT
 Part 2
 Sci March 1
 59/3149

On the Correlation Between Hardness and
Composition of Diluted Solid Solutions,
by V. P. Shishokin, V. A. Agayev, Tpp.

RUSSIAN, per, Fiz Metal i Metallovedeniye,
Vol II, No 1, 1956, pp 176-180.

SLA 60-16955

196, 977

Sci
May 62

Vol 4, No 10

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RUSSIAN, per, Fizika i Metallovedeniye, Vol II, No 2,
1956.

CIA/FDD X-2278

CIR/12-11-1956

To the Theory of Antiferromagnetism, by S. V.
Tiablikov, 23 pp.

RUSSIAN, per, Fiz Met i Metali, Vol II, No 2,
1956, pp 193-207.

SLA R-1136

May 58

64,560

On the Theory of Ferromagnetism in a Non-Ideal
Lattice, by V. L. Bonch-Bruевич. UNCLASSIFIED

RUSSIAN, per, Fiz Metallov i Metallovedeniye,
Vol II, No 2, pp 215-221, 1956.

Navy Tr 1675/NRL-659

Sci - Phys
Apr 58

60,743

Stabilization of Austenite at Temperatures above
the Martensitic Transformation Range, by
K. A. Malyshev, N. A. Borodina, V. A. Mirmel Shtein,
16 pp.

RUSSIAN, per, Fiz Met i Metall, Vol II, No 2,
1956, pp 277-284.

SLA R-1976

Sci
Aug 58

76,879

Krishtal, M. A.
CALCULATING THE ACTIVATION ENERGY IN
DIFFUSION PROCESSED (K Voprosu ob Opredeleeni
Energii Aktivatsii Diffuzionnykh Protsessov). Apr 61
[13]p. 7 refs. RTS 1610.
Order from OTS or SLA \$1.60 61-19669

Trans. of Fizika Metallov i Metallovedeniye (USSR)
1956 [v. 2] no. 2, p. 303-308.

DESCRIPTORS: *Diffusion, *Cast Iron, *Carbon,
Temperature, Velocity, Energy

The equation defining the relation between temperature
and the velocity of processes connected with reactive
diffusion is examined. The results obtained justify the
conclusion that the values of the activation energy of a
complex process calculated by a simple exponential re-
lation cannot always be used as a criterion of the rate-
determining step. A method is indicated for calculating

(Metallurgy--Ferrous Metals, TT, v. 6, no. 3) (over)

61-19669

I. Krishtal, M. A.
II. RTS-1610
III. Department of Scientific
and Industrial Research
(Gt. Brt.)

175291

Office of Technical Services

Investigation of Diffusion of Boron and Carbon
Into Some Metals of the Transition Groups, by
G. V. Samsonov, V. P. Latysheva.

RUSSIAN, per, Fiz Metallor i Metallovedeniye,
Vol II, No 2, 1956, pp 309-319.

Henry Bratcher
Tr No 3902
\$7.80

45,126

Sci - Min/Metals
Mar 1957 CIB/dex

11-11-57

Relief Effects on the Cleavage Surfaces of Zn,
Bi, and Sb Caused by the Formation of Twinned
Layers, by V. I. Startsev, V. M. Kosevich, 9 pp.

Find
RUSSIAN ^{paper} per. Fiz Metal i Metall, Vol II, No 2,
1956, pp 3205.

CIA/FDD X-2619

REC 5-4180

Sci - Min/Metals; Physics
Nov 57

54,932

X-Ray Examination of Phenomena Accompanying
Prolonged Tension of Steel at High Temperatures,
by M. Ya. Fuks, N. V. Slonovsky, L. I. Lupilov,
9 pp.

RUSSIAN, per, Fiz Met i Metall, Vol II, No 2,
1956, pp 328-338.

CIA/z-350

47, 185

DSI-222

Sci - Min/metals

Apr 57 CTS/dex

See [unclear] 9/1/75

Vickers and Rockwell Hardness as a Function of
Plasticity Parameters of a Metal and Conditions of
Experiment, by G. P. Zaitsev.

RUSSIAN, per, *Fiz Metal i Metalloved Akad Nauk SSSR*, ~~ISSN~~
Ural Filial, Vol II, 1958, pp 339-350.

ATS RJ-1752
ATS 662297

Sci / *min* / *met*
Jul 59

90, 557

On the Oxidation of Tungsten at High Temperatures,
by V. N. Ansharov, Yu. D. Kozmanov.

RUSSIAN, part, Fiz Met i Metallov, Vol II, No 2,
1956, pp 361-369.

Scrutcher Tr 4104
\$9.80

Sci - Physics
Jul58

66, 285

D2

TT-62-28079

- I. Vol'kenshtein, N.V.
- II. Fedorov, G.V.
- III. CNRS-X 407
- IV. Centre National de la Recherche Scientifique, Paris

Vol'kenshtein, N.V. and Fedorov, G.V.
SUR LA MESURE DE L'EFFET HALL-KIKOÏNE (On
the Measurement of the Hall-Kikoïne Effect). 4p.
3refs. CNRS-X 407.
Order from OTS, ETC or CNRS \$0.80 TT-62-28079

Trans. in French of Fizika Metallov i Metallovedenie
(USSR) 1956, v.2, no.2, p.377-388.

DESCRIPTORS: *Ferromagnetism, Ferromagnetic
materials, Measurement, *Hall effect.

(Physics--Solid State, TT, v. 11, no. 6)

Office of Technical Services
European Translations Centre

Table of Contents

RUSSIAN, per, Fizika i Metallovedeniye, Vol II, No 3,
1956.

CIA/FDD X-2278

CONFIDENTIAL - 2493

On the Temperature and Field-Dependence of the Magnetic
Anisotropy Constants of Cubic Crystals, by S. V.
Tiablikov, A. A. Gusev, 12 pp.

RUSSIAN, per, Fiz Metal i Metall, Vol II, No 3,
1956, pp 385-391.

SIA R 1493

May 58

63,217

**In the question of the Absorption and Emission of
Phonons, by M. S. Svirskiy, 10 pp.**

**RUSSIAN, per, Fiz. Met. i Metallov., Vol II, No 3,
1956, pp 397-402.**

S.L.A. Tr No R-195

**Sci - Physics
Apr 57**

46,986

Susceptibility of Ferromagnetics in the Temperature Range Above the Curie Point, by K. B. Vlasov, S. V. Vonsovskiy, 6 pp.

RUSSIAN, per, Fiz Met i Metall, Vol II, No 3, 1956, pp 403-405.

SLA R-1492

May 58

RUSSIAN to GERMAN
... ..
... ..
... ..
87.331 *63,353*

Sintering of Metal Powder Mixtures in the System
Copper-Nickel; Similarly Shaped Powder Particles,
by Ya. Ye. Geguzin. UNCLASSIFIED

RUSSIAN, per, Fiz Metal i Metall, Vol XI, No 3,
1956, pp 405-417.

Sci Mus Lib 57/4284

Sci - Phys; Min/Met
Sep 58

73,390

To the Thermodynamic Theory of Magneto-Elastic
and Magnetostrictive Phenomena in Ferromagnetics,
by K. P. Belov, 13 pp.

RUSSIAN, per, ~~Fiz. Met. i Metal.~~ Vol II, No 3, 1956,
pp 447-453.

SLA Tr R-873

52, 304

Sci - Physics

Sep 57

Influence of Additions of Silver or Zinc to
Aluminium on the Rate of Diffusion of Copper,
by V. I. Ansharov, E. I. Koskova. UNCLASSIFIED

RUSSIAN, per, Fiz Metall i Metallovedeniye, Vol
II, No 3, pp 472-476.

Sci Mus Lib Tr 57/2509

Sci - Phys
Sep 58

73,140

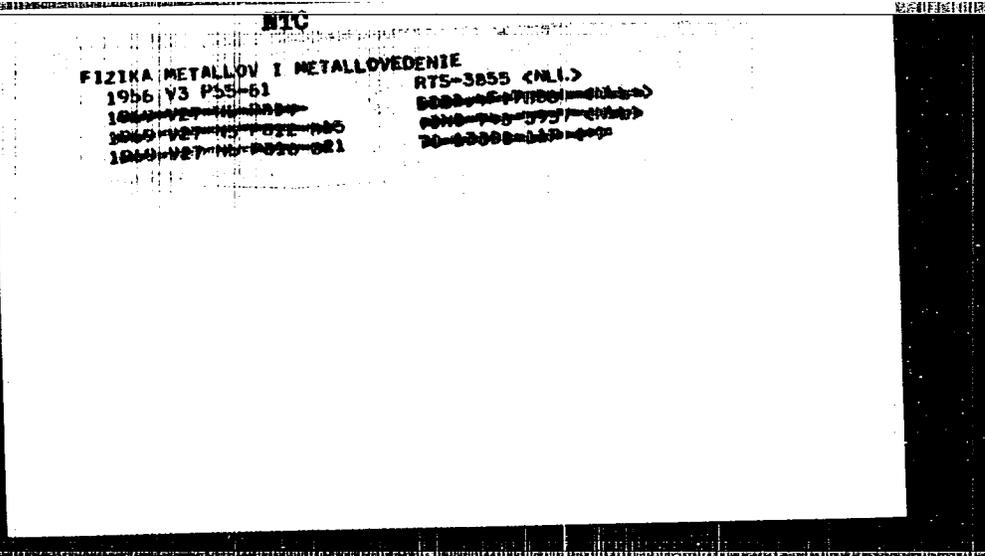
Investigation of the Structure of a Deformed
Al-Cu Alloy With an Electron Microscope, by
H. N. Buinov, O. D. Shaskov.

RUSSIAN, par, Fiz Metallov i Metall, Vol II, No 3,
1956, pp 484-488.

Fulmer Res Inst, Ltd.
Tr 104
OR/2896

Sci - Min/Met
Sep 58

72,406



X-Ray ~~EXPERIMENTAL~~ Spectra and Interatomic Bond in A
Alloys, by S. M. Karal'nik, 8 pp.

RUSSIAN, per, Fiz Metal i Metall, Vol III,
No 3, 1956, pp 503-507.

LA 60-16991

Sci
May 62

196, 873

Vol 4, No 10

High-Temperature Oxidation of Titanium in Steam,
by G. P. Luchkin, G. G. Il'in

RUSSIAN, per, *Fiz Metalloy i Metallovedeniya*,...
Vol II, No 3, 1956, pp 521-523.

Brutcher No 3830
\$2.90

Sci - Min/Metals
Dec 56 CTS

41, 422

Z-268

Sci 70, 3, 521-523

Influence of Interstitial Atoms on the Ordering of an Alloy, by A. A. Smirnov, I. A. Stoyanov, 13 pp.

RUSSIAN, per, Fiz. met. i Metalloved., Vol II, No 3, 1956, pp 524-530.

Sci Mus Lib Tr 57/2274

Sci - Physics
Nov 57

55, 277

Formation of Sigma Phase in High-Alloy Austenitic Steels and Alloys, by E. M. Pivnik.

RUSSIAN, mo per, Fizika Metallov i Metallovedenie, Vol II, No 3, 1956, pp 531-537.

Brutcher Tr 3981
\$5.80

Sci - Min/Met

57,368

Jan 58

An Apparatus for Measuring Surface Tension
and Density of Liquid Metals in Vacuum, by
N. L. Pokrovskiy, M. Saidov, 6 pp.

RUSSIAN, no per, Fizika Metallov i Metallova-
diniye, SSSR, Vol II, No 3, pp 546-551, 1956,

Navy Tr No 1497/NRL 614

Sci - Engineering
Jun 57

49,067

SLA 3-1957

Henry Bratches

4057 74.20

Table of Contents of:
Fizika Metallov i Metallovedenie

Volume III, No3, 1956

FDD X 2624

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RUSSIAN, per, Fizika i Metallovedeniye, Vol III, No 1 (7),
1956.

CIA/FDD X-2278

CIA/FDD/R-2278

On the Computation of the Magnetization of Fer-
rites Depending on the Temperature and Field, by
S. V. Tiablikov, 15 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No 1,
1956, pp 3-10.

SIA Tr H-662

Sci - Electricity

Aug 57

50,671

Remark on the Stationary States of an Electron
in a Non-periodic Field by A. I. Rezanov.

RUSSIAN, no per, Fiz Metal i Metal, Vol III, No 1,
1956, pp 11-15.

* Morris D. Friedman for Lincoln Lab
(Will appear in SIA later)

Sci -
Sep 57

On the Spectrum of Oscillations of a Ferromagnetic
Elastic Medium, by E. A. Turov, I. P. Irkhin, 6 pp.

RUSSIAN, per, Fiz Met i Metal, Vol III, No 1(7),
1956, pp 15-17.

SLA Tr R-867

Sci - Electricity, Physics 52, 272

Sep 57

DeHaas-Van Alphen Effect for Slightly Bound
Electrons in the Lattice, by G. E. Silberman, 7 pp.

RUSSIAN, per, Fiz Mat i Met, Vol III, No 1, ⁷XI 1956
1956, pp 18-21.

Physics
Sci - ~~Electronics~~
May 57

S.L.A. Tr R-428
M. D. Friedman

48, 764

Effect of High Pressure on Thermal Properties of
a Solid Body, by K. P. Rodyonov, 9 pp.

RUSSIAN, per, Fiz Met i Met, Vol III, 1956, pp 26-30.
9216845

ABC-UCRL-Tr-397(L)

Sci - Mat & Met
Jan 64

246,151

Influence of the Ordering Process on the
Temperature Dependence of the Magnetic
Properties of an Fe-Ni-Mo Alloy, by M. V.
Dekhtiar, 13 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III,
No 1, 1956, pp 55-61.

SLA R-1553

Sci

Aug 58

69, 846

Kinetics of Growth of the ~~Binary~~ Diffusional
Layer in the Boronizing of Steel, by V. D. Taran,
L. P. Skugorova.

RUSSIAN, no per, Fiz Metal i Metall, Vol III, No 1,
1956, pp 66-69.

Henry Bratcher

No 3976

\$2.80

53,202

Sci - Min/Metals
Sep 57

On the Diffusional Mobility of Atoms During
the Melting and Recrystallization of Metals,
by P. L. Grazin, A. D. Tyutyunik, 8 pp.

RUSSIAN, no per, Fizika Metallov i Metallovedeniye,
Vol III, 1956, pp 70-.

CIA/FDD X-2525

Sci - Physics
Aug 57

51,844

SLAR-1988

On the Theory of the Polymorphism of Iron, by V. N. Svechnikov and A. G. Lesnik, 18 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No 1, 1956, pp 87-96.

SLA R-1771

Sci

Aug 58

71,446

Zone Melting: Preparation of Pure Metals by Zone
Melting, by B.N. Aleksandrov.
RUSSIAN, per Fizika Metallov. I. Metallovedenie, Vol. 2
No. 1, 1956 pp 93-119
GB 345

Sci -
Sep 67

339-780

Internal Friction in Deformed Alloys of the α -
Solid Solution of Aluminum With Magnesium, by A. V
Grin, V. A. Pavlov, 4 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No 1,
1956, pp 179-180.

Sci Mus Lib Tr 57/3490

Sci - Min/met
Apr 58

60,519

Effect of Hydrostatic Pressure Upon the Hardness
of Carbon Steel, by V. A. Gladkovskiy.

RUSSIAN, no per, Fizika Metalloy i Metallovedeniya,
Vol III, No 1, 1956, pp 183, 184.

Henry Bratcher

Tr 3941

\$1.50

SLA 59-28667

50,676

Sci -- Physics
Aug 57

Anisotropy of the Rate of Crystal Growth, by
F. P. Rybalko.

RUSSIAN, no per, ~~Fizika Metalloy i Metallovedeniye,~~
Vol III, No 1, 1956, pp 184-185.

Henry Bratcher
Tr 3942
\$1.90

Sci - Physics; Min/Metals 50,686
Aug 57

Effect of Differences in Ductility on Fracture Patterns
by F. P. Rybalko.

RUSSIAN, bimo per, Fiz Metal i Metall, Vol III, No 1,
Sverdlovsk, 1956, pp 105, 106.

Brutcher Tr 3923
\$1.75

Sci - Min/Met

Jan 58

57,038

Variation of the Magnetic State of Soft Magnetic
Materials Under Action of Alternating Magnetic
Fields, by I. E. Startseva, I. S. Shur, 3 pp.

RUSSIAN, per, *Fiz Met i Metal*, Vol III, No 1,
1956, pp 190, 191.

SLA Tr R-850

Sci - Electricity, physics 52, 271

Sep 57

On the Energy of Vacancy Formation in
Metals and Alloys, by S. D. Gertziken, 4 pp.

RUSSIAN, per, Fizika Metallov i Metallov,
Vol III, 1956, pp 238.

Sci - Min/Metals
Jul 57

REC-7-29-77
CIA/TOD X-2482

SII R-1761

49,193

63-10650

Silin, V. P.
ON THE THEORY OF THE COLLECTIVE DESCRIPTION OF THE INTERACTION OF ELECTRONS IN A SOLID. [1962] 14p. 20 refs.
Free copies available from Boeing Scientific Research Labs. Library as Boeing Trans. R6. When supply is exhausted, order from OTS or SLA \$1.60, 63-10650

Trans. of Fizika Metallov i Metallovedenie (USSR)
1956, v. 3, no. 2, p. 193-199.

DESCRIPTORS: *Electrons, *Solids, Metals, *Quantum mechanics, *Quantum statistics, Elementary particles.

Some results are set forth associated with obtaining kinetic equations for electrons that take into account the presence of spin. In this connection, the correlation of particles due to their indistinguishability is also taken into account. The equations found are utilized to (Physics--Solid State, TT, v. 9, no. 6) (over)

I. Silin, V. P.
II. Boeing Trans-R6
III. Boeing Scientific Research
Labs. Seattle, Wash.

Office of Technical Services

63-14447

Sokolov, A. V.
GENERAL PHENOMENOLOGICAL THEORY OF
MAGNETO-OPTICAL PHENOMENA IN FERRO-
MAGNETS. [1963] 11p. 15 refs.
Order from OTS or SLA \$1.60 63-14447

Trans. of Fizika Metallov i Metallovedenie (USSR)
1956, v. 3, no. 2, p. 208-215.

DESCRIPTORS: *Ferromagnetic materials, Magnets,
*Magneto-optic effect, Dielectric properties,
Electromagnetic fields, Differential equations, Theory.

(Physics--Magnetism, TT, v. 10, no. 7)

I. Sokolov, A. V.

Office of Technical Services

Santalov, F. A.
THE INFLUENCE OF ADDITIONS OF LOW-MELTING METALS ON THE RATE OF EXPULSION OF A VOLATILE COMPONENT FROM SOLID SOLUTIONS AND ON THE STRUCTURE OF THE SPECIMENS. [1960] 20p. (3 figs. omitted) 8 refs.
Order from LC or SLA ml\$2.40, ph\$3.30 61-10665

Trans. of Fiz[ika] Metallov i Metalloved[eniye] (USSR) 1956, v. 3, no. 2, p. 247-253.

If in the presence of a third element in an alloy the expulsion rate of the volatile component is increased, then the compression of the sample is reduced and the total pore volume is increased. If the expulsion rate is reduced in the presence of the third element, the compression of the sample increases and the total porosity decreases. The parallelism between the influence of the third element on the expulsion rate and the structure of the specimen attest that the expulsion of the volatile component from solid solutions is a (Chemistry--Physical, TT, v. 5, no. 9) (over)

61-10665

1. Zinc--Diffusion
 2. Cadmium--Diffusion
 3. Alloys--Microstructure.
1. Santalov, F. A.

151813

Office of Technical Services

Structure of Magnetite in Diffusional Reduction
Layers on [Grains of] Hematite, by V. I.
Arkharov, V. N. Bogoslovskiy.

RUSSIAN, per, Fizika Metallov i Metallovedeniye,
Vol III, No 2, 1956, pp 254-268.

Henry Bratcher Tr No 3913
\$13.40

47,042

Sci - Min/Metals
Apr 1957 CTB/sex

On the Texture of an Iron Scale, Part VII. II
Nature of Texture in the Intermediate Temperature
Range, by V. I. Arkharov, Z. P. Kichigina.

RUSSIAN, per, Fiz Metallov i Metallovedenie, Vol
VII, No 2, 1956, pp 269-277.

Navy Tr 1.624/NRL Stock 644

Sci - Phys
Feb 58

58,587
DSIR LLU M.437

Study of Bond Forces in Solid Solutions of Iron and Molybdenum From the Fine Structure of X-Ray Absorption Spectra, by V. A. Trapeznikov, ~~xx~~ S. A. Nemnonov.

RUSSIAN, per: Fizika Metallov i Metallovedenie. Vol III, N 2, 1956, pp 314-320.

Brutcher Tr 4009

\$8.85

OTS 60-1689260,378

Sci - Physics
Mar 58

11 216

GE-1

KHOTKEVICH V. I.

Maximum elasticity and plasticity of some metals at the
temperature of liquid helium

Grenzelastizität und Plastizität einiger Metalle bei der
Temperatur flüssigen Heliums

*Fiz. Met. i Metallov., 3, No. 2, 321-325 (1956)

German

E u r a t o m

Purification of Tellurium and Antimony, by
F. I. Vasenin, 4 pp.
or Vasovich?
RUSSIAN, per, *Fiz Met i Metalloved*, Vol III,
No 2, 1956, pp 360-362.

SLA R-663

Sci - Minerals/Metals
Oct 57

54, 255
DSIR/32387/CT

To the Multielectron Theory of Semiconductors, I,
by S. V. Vonsovskiy, Yu. P. Irkhin, A. N. Kushnirenko,
E. A. Turov, 19 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No 3, 1956,
pp 385-394.

SLA R-1973

Sci
Jul 58

68,333

On the Theory of Exciton Excited States, by V. S.
Calishev, S. V. Vonsovskiy, 18 pp.

RUSSIAN, per, Fiz Metal i Metallov Ak Nauk SSSR
Ural Filial, Vol III, 1956, pp 395-405.

AEC WP 157

SCA 59-10308

Sci - Phys

Dec 58

78,239

On the Theory of Antiferromagnetism, by A. A.
Berdyshev, I. I. Iziunov, 7 pp.

RUSSIAN, per, Fiz Metal i Metallov, Vol III, No 3,
1956, pp 406-410.

SLA R-1137

Sci
May 58

63,282

To the Theory of Antiferromagnetism, I. -- to the Theory
of Antiferromagnetism, II, by A. Ts. Amatuni.

RUSSIAN, no per, Fiz Metal i Metal, Vol III, No 3, 1956,
pp 411-421; Vol IV, No 1, 1957, pp 17-27.

*Morris D. Friedman for Lincoln Lab
(Will appear in SIA later)

Sci - Physics
Sep 57

SLA R-1592J

Paramagnetism of Conduction Electrons, by G. S.
Krinchik, 21 pp.

RUSSIAN, per, Fiz Metal i Metallov, Vol III, No 3,
1956, pp 422-432.

SLA R-1443

May 58

63,207

Thermomagnetic Nernst Effect in Iron-Nickel Alloys,
by E. P. Svirina, R. P. Ivanova.

RUSSIAN, per, Fiz Met i Metal, Vol III, No 3, 1956,
pp 444-448.

MIT, Lincoln Lab

Sci - Min/Met

May 58

(S. 63, 950)

Structure of Hematite in the External Layer of
Iron Scale, by V. I. Arkharov, B. S. Borisov.
UNCL

RUSSIAN, per, Fiz Metal Metalloved, Vol III,
No 3, 1976, pp 460-467.

DSIR LIU (loan) M.438

Sci - Min/Nat
Aug 59

94, 842

Texture of Iron Scale. VIII. A Study of the
"Intermediate" Stage in the Oxidation of Alloy
Iron, by D. I. Arkharov, Z. P. Kichigina. UNCL

RUSSIAN, per Fiz Metal Metalloved, Vol III,
No 3, 1956, pp 468-470.

DBIR LRU (loan) M.439

Sci - Min/met
Aug 59

94,843

The Effects of Alloying Elements on the Heat Resistance of Alloys and Cohesive Force in Lattices of the Oxide Phases in Scale 1. The Effect of Chromium on the Cohesive Forces in Hematite, by V. I. Arkharov, B. S. Borisov.

RUSSIAN, par, Fiz Metal i Metallov, Vol III, No 3, 1956, pp 471-476.

SIA 60-16990

156905

Sci - Min/Met
Jun 61

On the Ordering Mechanism of an Ni-Mn Alloy with
Different Molybdenum Additions, by B. G. Lifshits,
B. V. Molotilov, N. N. Muller, N. A. Savost'yanova.

RUSSIAN, per, Fiz Met i Metal, Vol III, No 3, 1956,
pp 477-485.

MIT, Lincoln Lab

Sci - Min/Met

May 58

63, 952

A Magnetic Method for Detecting Diffusion in
Metals, by Milner, Feodoseva. UNCLASSIFIED

RUSSIAN, per, Fiz Metall i Metall, 1956, No 3,
pp 483-485.

NLL 11.4/66
Co-op Tr Schem:
Tr 764
(L1.5.0)

Sci - Phys
Apr 58

62,666

Metal Strength and No-Load Stresses of the Second Kind, Induced by Decrease in Temperature, by G. P. Zaytsev, 20 pp. UNCL

RUSSIAN, per, Fiz Metal i Metall, Vol II, No 3, 1956, pp 494-503. 9660862

AMIC MCL-522/III

Sci - Min/met,
Apr 61
IC 40347

OTS NP-tv-575

147,891

X-Ray ~~EXPERIMENTAL~~ Spectra and Interatomic Bond in A
Alloys, by S. M. Karal'nik, 8 pp.

RUSSIAN, per, Fiz Metal i ~~Met~~ Metal, Vol III,
No 3, 1956, pp 503-507.

SLA 60-16991

Sci
May 62

Vol 4, No 10

Effect of Lubricant on Penetration of a Diamond-Point Indenter Into Ductile Metals, by V. D. Kuznetsov, A. I. Loskutov.

RUSSIAN, por, Fiz Metall i Metallov, Vol II, No 3, 1956, pp 509-513.

Henry Bratcher ~~XXXXXX~~ *4275 4406*
\$4.90

Sci - Min/Mat

Jan 59

78,639

The Problem of Graphitization of Low-Carbon
Steel, by I. V. Salli, I. I. Pyacetskiy.

RUSSIAN, no per, Fizika Metallov i Metallovedeniye,
Vol III, No 3, 1956, pp 513-515.

Henry Bratcher
Tr 3952
\$3.35

Sci - Min/Metals
Aug 57

50,704

X-Ray Analysis of the Dimensions of Blocks
in Cast Monocrystals of Aluminium, by
D. Ye. Ovisenko, Ye. I. Sosnina.
RUSSIAN, per, Fiz Metal i Metallov, Vol 3,
No 3, 1956, pp 516-526.
NLL Ref: 8732 (NRC TT-1330)

Sci-Phys
May 69

380,707

Peculiarities in the Decomposition of Aus-
tenite under High-Frequency Tempering and
Subsequent Annealing, by I. N. Kidin, 14
pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No
3, 1956, pp 530-536.

SLA R-2358

Sci

Aug 58

Handwritten notes:
72,568
2/11/58

Hardness of Steel as Function of Temperature,
by A. I. Betaneli.

RUSSIAN, per, Fiz Metal i Metallor, Vol III,
No 3, 1956, pp 540-546.

HB 4234

Sci - Min/Met

Sep 60

127,040

On the Question of the Spectrum of Weak Excitation of an Electron System in a Periodic Field, by P. S. Zyrienov and G. G. Talits, 5 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No 3, 1956, pp 547, 548.

SLA R-2114

Sci
Aug 58

71,007

Method of Experimentally Investigating Domain
Boundaries in Ferromagnetics, by G. S. Krinchik, 4 pp.

RUSSIAN, per, ~~Fiz Met i Metall~~, Vol 1 III, No 3,
pp 549-550, 1956.

SIA R-2043

Sci *P*
Aug 58

71,030

On Galvanomagnetic Phenomena in Semiconductors in
a Strong Electric Field, by F. G. Bass, 3 pp.

RUSSIAN, per, Fis Met i Metall, Vol III, No 3, 1956,
pp 550, 551.

SIA R-2115

Sci

Aug 58

71,013

Effect of Small Quantities of Certain Alloying
Elements Upon Temper Brittleness, by I. E.
Kontorovich.

RUSSIAN, mo per, Fiz Metal i Metall, Vol III, No 3,
1956, pp 553-555.

Henry Bratcher

No 3994

\$2.85

53,206

Sci - Min/Metals
Sep 57

X-Ray Studies of Distortion and Cohesive Forces in the Crystal Lattice of Alloys of an [a]-Solid Solution of Aluminum and Magnesium, by N. I. Moskova, V. A. Pavlov, B. A. Yunikov, 5 pp.

RUSSIAN, per, Fiz Metal i Metalloved,
Vol. XIX, No 3, 1956, pp 557-560.

SLA 60-16988

Sci
Vol IV, No 9
Mar 62

187, 231

On the Question of the Absence of Super-
conductivity in Ferromagnetics, by E. S.
Svirukiy, 3 pp.

RUSSIAN, per, Fiz Met i Metall, Vol III, No
3, 1956, pp 560, 561.

SLA R-2112

Sci

Aug 58

71,427

Effect of Transformation of Lebeaite Upon the
Stability of Ferronilicon, by I. N. Sankov, D. V.
Gel'd.

RUSSIAN, per, Fiz Metal i Metallor, Vol III, 1956,
pp 564-565.

Butcher Tr 415b
\$2.00

Sci - Min/met
Jul 58

66, 287

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Fiz Metal i Metallovedenie, Vol IV, no 1(10) 1957

FDD X 2624

Effect of Elastic Stresses and Thermomechanical
Treatment on the Magnetic Properties of High
Coercivity Alloys, by Y.S. Shur.
RUSSIAN, per, Fiz. Met. i Metalloved, Vol. 2, No. 3
1956, pp 567-568
NLL/M. 5198

Sci -
Aug 67

334-738